CALFED Bay-Delta Program Project Information Form
Watershed Program- Full Proposal Cover Sheet

Attach to the cover of full proposal. All applicants must fill out this Information Form for their proposal. Failure to answer these questions and include them with the application will result in the application being considered non responsive and for funding.

Full Proposal Title: PARTNERSHIP FOR SUB-REGIONAL WATERSHEDFORUMS AND A WATERSHED CENTER
Concept Proposal Title: PARTNERSHIP FOR SUB-REGIONAL WATERSHED FORUMS AND CENTERS
Applicant: Merritt College Environmental Program
Applicant Name: Robin Freeman
Applicant Mailing Address: 1170 Powell St. Oakland, California 94608-2617
Applicant Telephone: (510) 848-5713 msg. **Applicant Fax:**(510) 655-3637.
Applicant Email: robinf5713@aol. com
Fiscal Agent Name: (if different from above): Alameda County Resource District
Fiscal Agent Mailing Address: 1996 Holmes St. Livermore CA, 94550
Fiscal Agent Telephone:(925) 321-0154 ext.41 **Fiscal Fax** (925) 371-0155
Fiscal Agent Email rharben@baysavers.org

2. **Type of Project:** Indicate the primary topic for which you are applying
(check only one)
X . Capacity Building

3. **Type of Applicant**
X Academic Institution/ University

4. **Location (including County)**
X . Bay-Delta (Coast and Sierra Ranges)

5. **Amount of funding requested**: $500,000 over 3years
Cost share/ in-kind partners? X . Yes
Identify partners and amount contributed by each:

Merritt College Environmental Studies Program	$ 257,000
Friends of the Estuary	$ 15,000
Environmental Science Institute	$ 10,000
ABAG, CALFED Task Force	$ 10,000
Watershed Assessment Resource Center	$ 5,000
One Acre GIS, Oasis Group	$ 5,000
Save San Francisco Bay Association	$ 5,000
City of Oakland, Environmental Services Division	$ 5,000
Friends of Temescal Creek	$ 5,000
Environmental Justice Water Coalition	$ 5,000
Aquatic Outreach Institute	$ 5,000
B. C. Capps	$ 5,000
Gary Scott, Ph.D.	$ 5,000
Susan Maxwell	$ 5,000
Francesca Demgen	$ 5,000
San Francisco Estuary Institute	$ 5,000
Christopher Richard	$ 5,000
Janet Sowers	$ 5,000

6. **Have you received funding from CalFed before** N .

PARTNERSHIP FOR SUB-REGIONAL WATERSHED FORUMS AND A WATERSHED CENTER

1. PROJECT DESCRIPTION

This is a 3 year capacity building program to create an accessible prototype Watershed Center, which will be expanded into a network of locally led Watershed Centers. The prototype will serve a geographic sub-region of the CALFED Bay-Delta Region (in Alameda County) which we define under the Structure heading of this section.

The network of locally led Watershed Centers is designed to fill a gap in scale between regional resources and local needs and to increase communication among neighboring watersheds' groups. The prototype Watershed Center will be located at the existing Merritt Community College Environmental Center and will build on our well developed partnership's experience with field programs, outreach, technical skills, and websites.

The Watershed Forum will provide an ongoing prominent and accessible public venue for communicating needs and connecting to resources. The Watershed Center will provide the location and support staff for both the Forum (described later) and local watershed groups. This function does not currently exist as a formal structure.

The first capacity building activity will be to contact existing watershed resource organizations to invite them to help expand the partnership and advisory participant base.

Our strategy is to include under-represented communities in watershed planning, and conduct science based watershed assessment through these tasks. The Field Training and Public Education Partnerships will deliver both watershed awareness and science based assessment and planning workshops on a regular schedule at low or no cost. The Forums will host discussions of shared goals consistent with the CALFED Bay-Delta Goals and Principles.

This proposal adopts the *CALFED Bay Delta* (July 2000) as an guide for initiating the Sub-Regional Watershed Forums and Watershed Center network. The proposal builds on the substantial amount of work which went into developing the Watershed Program Plan.

Outcomes The goal is to improve the awareness of and capacity for local watershed stewardship and management by citizen groups, schools, planners, land owners, businesses, and elected officials. These groups already execute or oversee the many small projects which cumulatively affect stream flow, water quality, habitat, and human use benefits. Fragmented local watershed groups will be better able to connect for a healthier, more stable, and cleaner watershed ecosystem without the existing gap in scale and with increased communication. Groups will benefit from connection to new and existing regional, state and federal watershed resources from varying locations and in various formats. In the long term, water supply will be improved through reduced urban landscape irrigation demand. The planned Watershed Centers will aid with collaborative funding efforts and will develop a plan to become self-sustaining. This proposal projects that support for deficient infrastructure connections will increase the scale and effectiveness of local watershed projects.

The 17 primary watersheds and 4 reservoirs of the initial Center sub-region include a wide variety of rain fed habitat types and land uses. The watersheds range from extremely degraded, industrial, and low income urban areas to agricultural and wild lands. Learning to assess and plan within these urban watersheds will provide a large population with direct experience of watershed values and of the impacts of various planning alternatives. This broadened awareness should aid with achieving CALFED Goals.

Structure. Several Watershed Centers of various types exist locally and nationally. The Watershed Centers will learn from these, help link the local ones together, and develop a delivery system for watershed awareness planning, and activities. The proposed system will be built on these tasks we propose to implement with CALFED funding:

- Developing Databases
- Developing Watershed Forums
- Developing a Field Program in Watershed Awareness, Monitoring, and Project Implementation
- Developing an Outreach Program as capacity building
- Developing an Assessment Science Program
- Developing a permanent Watershed Center and plan a subset of Riparian Centers
- Developing Policy Oversight.

Five Advisory Teams, composed initially of Team Member consultants, will coordinate these tasks.

Location. The prototype Watershed Center will be located in space contributed by the Merritt College Environmental Center. Projecting beyond this proposal, a network of staffed Watershed Centers would serve all sub-regions of the Bay Delta system. A "sub-region" is defined here by a combination of social and watershed geography. Our experience has shown that people are most likely to participate in activities which are local to them. We project that services distributed within this social geography have the best chance of being used.

The area stretching from San Pablo Creek in Richmond south to San Leandro Creek in Oakland fits this geography. It includes both urban and rural, private and public, estuarine and mountain upland watershed types. It has numerous existing and some overlapping resources. These are well enough developed to make it a likely location for Watershed Center a to be sustainable. It is a least cost program development site. This prototype Watershed Center will assemble its resources with a plan to collaborate with CALFED and encourage development of other centers.

Watershed Centers (initially a prototype Watershed Center) will provide a trained, multicultural staff and suite of mechanisms for watershed groups' mutual use. Services will include:

- An general regional watershed information dissemination point, meeting place, community dialogue place, and volunteer listing site
- A data repository for regional and local watershed information, technical data, catalog of project sites, and list of local watershed management and assessment needs
- An inclusive analysis of the watershed activities in the service area watersheds
- Providing annotated guides to existing programs
- Identification of under-served sectors, generation of activities to serve them, multicultural environmental career access
- Monitoring equipment storage
- A clearing house to direct inquiries to the appropriate financial resource, technical resources, or event

As models of Environmental Justice programs to include historically under-represented communities. This project will coordinate with the Environmental Justice Water Coalition, the Yosemite Creek/Slough Watershed, and the Neighborhood House of North Richmond.

Riparian Centers We are defining these as: the community organizations, site specific projects on single watersheds and any other organized smaller-area activity needing a place in the structure. This is the level on which on-the-ground projects are most often implemented. Riparian Centers may or may not be staffed, and range from a secure storage area for monitoring equipment, or place in a school, to a nature interpretive center program, scientific research station, or restoration project. This proposal does not fund the Riparian Center level, but provides informational and technical field resources. The Aquatic Outreach Institute (AOI) and Friends of the Estuary Watershed Awareness Program (WAP) provide fundraising and organizational support at this level. We are coordinating with the AOI CALFED Watershed Program proposal. We feel it is an essential complementary level.

Forum The Watershed Center staff will support the Watershed Forum. The Forum will initially be composed of the partners and consulting Team Members (listed in section 2. Qualifications). The Forum will define Goals and Objectives for the Sub-Region. The Forum builds on the currently well attended local watershed meetings and activities which are not presently coordinated. Citizen creek groups, Environmental Justice groups, tribal members, government, scientific, educational, agency and environmental industry representatives have already advised or have agreed to advise, partner, or consult on this project. Business participation has been uneven, but is growing. The Forum will provide an ongoing opportunity to form partnerships and share resources and adopt common goals. The Forums will host discussions about common interests, problems, and assets. Local Watershed groups will be able to discuss shared goals even if they come to them for different reasons.

Advisory Teams:.

Management Team will: Set staff goals, tasks, schedules, and budgets. Invite participants to and conduct the first Forum meetings. The Management Team will initiate Adaptive Management of the Watershed Forum and Watershed Center. As the Forum matures, it will assume the duties of the Management Team, which may phase itself out as the Forum takes on the policy function.

Field Program Team This is the hub of the education programs. . Our experience has shown that walking, measuring, and visiting the whole watershed is a powerful motivator. Field experience informs stakeholder

communication, spurs activity, and increases awareness. The Field Program will bring scientists and technical professionals together with community stakeholders at watershed sites to promote voluntary collaboration.

The *Partnership for Sub-Regional Watershed Forums and a Watershed Center* proposal relies primarily on the Field Program to engage, inform, and attract participants. The Field Program will be a platform for recruiting members to join the Forum, for publicizing the Watershed Center, and for encouraging participation in local, on-the-ground watershed activities. The Field Program is responsible for public, outdoor, education, awareness, and monitoring training. It is also charged with coordinating with local groups design, installation, maintenance, and monitoring projects

The organizations forming the partnership currently run regular meetings, conferences, academic courses, outdoor workshops and conduct research. They bring expertise in biological and physical monitoring, watershed awareness, planning and design, environmental photography, water chemistry, hydrology, geomorphology, land use, hands on vegetation and streambed/bank restoration, pre-fire vegetation management, watershed human history and natural history. Evaluation of 20 years of watershed events indicates that outdoor field events and workshops have been the single most effective tool for involving diverse stakeholders in science, education, implementation, planning, monitoring, maintenance, and overall watershed awareness and appreciation. The workshops are both on land and by boat.

Outreach and Capacity Building Team advises staff on how to involve all stakeholders, ranging from individuals to government, in the Watershed Forum and process. This is a major function especially in the first years. This Team will:

- create an annotated list of Creek/watershed groups, their resources and needs
- Actively promote events and resources to this target list
- list available courses, workshops, education
- create and publicize meetings and public events for general awareness.
- create press releases, aid with *Creeks Speak* or other newsletter production,
- place information on websites
- plan tailored on-site watershed awareness field workshops and site visits for: capacity building for watershed assessment, local government staff, local elected officials, educational programs, research programs, landowners, Environmental Justice organizations, business, neighborhood groups, and Friends of Creeks groups.
- Involve target audience in evaluating activities provided

The team will collaborate with the Aquatic Outreach Institute and the Friends of the Estuary which both provide citizen group organizational support. The team will recruit additional partners from local watershed groups for expanding the Watershed Center network.

Scientific Oversight Team will be led by the San Francisco Estuary Institute and other scientific consulting partners. It will provide data collection methods, project design, project review, and set goals for data analysis, storage and retrieval systems. It will lead in identifying baseline survey parameters, and choosing sites to do coordinated field trainings.

Policy Oversight Team. consists of elected officials, agency personnel, planners, and representatives of community based organizations. Their task is to recruit Forum members, provide agenda items covering issues important to policy making bodies, and advise on ongoing funding. This team will be developed in collaboration with the Association of Bay Area Governments' CALFED Task Force.

Time Table: See Section 3, Budget.

2. QUALIFICATIONS

Institutional Capacity

Alameda County Resource Conservation District (RCD) The Alameda County RCD has been working in partnership with the USDA Natural Resources Conservation Service for 40 years. During the past 5 years, the partnership has been focusing on watershed management. The RCD leads a stakeholder-driven management process in the Southern Alameda Creek Watershed and the San Lorenzo Creek Watershed. RCD teaches 4th graders about their watershed through San Francisco Bay Savers program. The organization has a $390,000 annual budget.

RCD personnel and USDA NRCS staff have backgrounds in resource planning, soil conservation, range management, and environmental education. They also have been involved in successful Coordinated Resource Management and Planning (CRMP) Projects. The Partnership has developed strong working relationships with local public agencies and industry groups including California Department of Fish and Game, Alameda County Pubic Works, Regional Water Quality Contra Board, East Bay Regional Park District, East Bay Municipal Utility District, San Francisco Public Utilities Commission, Alameda County Agricultural Commissioner, Alameda County Farm Bureau, and the Contra Costa Alameda Cattlemen's Association.

Friends of the Estuary is a 501 c 3 nonprofit corporation whose mandate is to assist with the implementation of the Comprehensive Conservation and Management Plan for the SF Bay-Delta. Friends serves as a fiscal agent for groups and organizations whose work is related to the Bay-Delta. They have provided bank account, payroll and accounting services for several agencies including the Port of Oakland, SF Bay RWQCB, Golden Gate Audubon, Presley Homes and the Math-Science Nucleus.

Merritt College Environmental Studies Program will be used as the principal Field Program delivery system, collaborating with other watershed education organizations. As a community college**,** Merritt is affordable and has an inner-cities Middle and High School Environmental Education outreach program. Merritt Environmental Studies program regularly provides 5 to 10 courses with 75 to 150 students each semester.

One Acre GIS, Oasis Group provides a botanical survey method with volunteer and student training

Partners, providing technical and administrative support:

Environmental Science Institute (ESI), Oakland, CA. Develops and delivers environmental curricula for Communities of Color which currently have little access to them.

Friends of Temescal Creek (FoTC), A community watershed group, dedicated to integrating watershed based urban planning, access to nature, environmental justice, and specific area creek projects. FoTC has been partnering with the Merritt College Environmental Studies throughout its four year history.

Allen Edson is a Steering Committee member of Urban Habitat Program, San Francisco. He coordinates and conducts Brownfields research and related public health neighborhood education locally and nationally. He has provided wetlands restoration monitoring training at M.L. King Jr. Shoreline Park in the East Bay. Executive Director of the African American Development Association in Oakland, CA, and a Steering Committee member of Urban Habitat, the Presidio, San Francisco.

Dana Harvey M.S., Soils Scientist, has worked with ESI and University of California in Berkeley Department of Natural Resources as a multi-cultural outreach coordinator. She teaches and develops environmental education curricula.

Bruce Douglas P.E., Field Team Coordinator, Engineer, will provide technical design, mapping, and field expertise. As a Merritt College instructor and founder of Friends of Temescal Creek, he provides community watershed planning, outdoor education and organizing experience.

Robin Freeman M.A., Project Coordinator, Co-Director of the Merritt College Environmental Studies Program, has served on City and County environmental and land use related boards and commissions He is on the Education Committee of the Society for Ecological Restoration. He has been leading hikes on East Bay creeks, and working on restoration projects on them for 25 years and managed projects with up to 40 employees. He is a founding member of local creek organizations.

Gary Scott Ph.D., Science Team Consultant, Geologist. An early member of the first Sierra Club Urban Creeks Task Force, Dr. Scott has been training public agency personnel and students creek monitoring and restoration since 1989. He designed and teaches Restoration and Monitoring of Watercourses at Merritt College where he has planned and executed restoration projects..

Ron Harben, Fiscal Agent, Executive Officer, Alameda County Resource Conservation District

David Self M.S., Botanist, is Past President of The Society for Ecological Restoration, California and has developed and conducts the volunteer and student training One Acre GIS botanical survey method at Colleges and Parks with Susan Maxwell.

Susan Maxwell, Naturalist, Effie Yeaw Nature Center, is a Native American cultural heritage specialist

Initial Team Member Consultants

Outreach Team

Josh Bradt: Urban Creeks Council, Environmental Justice Water Coalition
Steve Cochrane: Friends of the Estuary
B.C. Capps: Bay Area Open Space Council, San Francisco Bay Joint Venture
Allen Edson: Director, Environmental Science Institute, Environmental Justice Water Coalition
Torri Estrada: Environmental Justice Water Coalition
Anne Hayes: Aquatic Outreach Institute

Science Team

Francesca Demgen: Senior Project Scientist URS Corporation, and Merritt College
Lester McKee: San Francisco Estuary Institute
Christopher Richard: Curator of Aquatic Biology, Oakland Museum, editor of Guide to East Bay Creeks, and map
Janet Sowers, Ph.D.: Project Geologist, William Lettis and Assoc., prepared map of East Bay Creeks for Oakland Museum

Policy Team

Lesley Estes, City of Oakland Public Works Environmental Services
Jennifer Krebs, ABAG, CALFED Task force
John Thelen-Steere, San Francisco Bay Joint Venture

Field Team

Bruce Douglas, P.E.
Robin Freeman
Mark Lane: geologist, Friends of Sausal Creek, Volunteer Monitoring
Marilyn Latta, Save San Francisco Bay Association
Laurel Marcus, Watershed Assessment Resource Center
Gary Scott, Ph.D.
David Self
Janet Sowers, Ph.D.

Partners' Previous Projects:

References: CDF funded Fire and Watershed Convention: Jill Butler. San Francisco Bay Fund funded Initial Study for Intertidal restoration: Allen Edson. Merritt College Watershed Field Program: Mark Lane, Marilyn Latta. Kristin Hathaway. Friends Of Temescal Creek, Greenway Plan Report: City of Emeryville,-Diana Murrell. Citizen involvement/church group outreach:-Margaret Bowman, St. John's Episcopal Church. Youth training and monitoring: Joan Suzio, EBRPD ranger at arrowhead marsh,. Citizen involvement and field opportunities, Bill McClung, Vicente Canyon Neighborhood Association. U.C. Davis Environmental Education Partnership, Prof. Dan Chang. Society for Ecological Restoration, SER '99: International Conference Session Planner, Deborah Amshoff. Contact information available on request

3. BUDGET

Matching funds will be $30,000 remaining in a contract with the California Department of Forestry and Fire Protection and $20,000 in an approved grant from the San Francisco Foundation San Francisco Bay Fund. Meeting and office space, telephones and office machines will be contributed by the Merritt College Environmental Center at $2,000/month in kind value. Faculty and student time from the Merritt College Environmental Studies field courses will be contributed at $15,000 per course with 3 courses per year pledged. Consultants on the Advisory Teams will contribute 50% of their time and Friends of Temescal Creek and B.C. Associates Consultants will contribute $5,000/year of administrative time as well as travel. Additional contributions are anticipated, but have not been included in this budget.

Staff Positions Salary Table

Position	**Full Time Equivalent**	**Cost**
Program Director	0.33	37,500
Advisory Team Coordinator(s)	0.5	33,750
Field Outreach & Science Coordinator(s)	0.5	33,750
Program Staff	0.5	26,000

Budget Spreadsheets, (6 pages)

The budget spreadsheets attached here reflect three years' funding for the proposal. We broke out year 1,2, and 3 for each Task, 1 through 8, to reflect the estimated variation in expenditures based on the Task's time line.

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY

	Task Description		*Completion month*		*Match Funds*	*CALFED funds*	*Total*
Task 1	**Administration**			yr1	10,000	33,120	43,120
				yr2	10,000	24,796	34,796
				yr3	10,000	24,796	34,796
Task 1a	Office Set up, Budget, Billing Procedure		3				
Task 1b	Record Keeping, Invoicing		3, 6, 9, 12				
Task 1c	Job Descriptions for staff, Announce Jobs,		3				
Task 1d	Interview/Hiring, Orient new hires		6				
Task 1e	Set Critical path		3				
Task 1f	Permit, NEPA/CEQA research		12				
Task 1g	Project Oversight		3, 6, 9, 12				
	Task Products						
	Job Descriptions		3				
	Schedule		3				
	Three Year Projection Schedule		6				
	Success Criteria						
	Announce Jobs	Circulated to 10 outreach lists	3				
	Interview/Hiring	Hire min 2 staff	3				
	Interview/Hiring	Hire min 2 staff additional	6				
Task 2	**Develop databases**			yr1	17,500	24,796	42,296
				yr2	7,500	16,564	24,064
				yr3	- 0 -	16,564	16,564
Task 2a	Research & assemble existing local & regional watershed resource information		12,18				
Task 2b	Research & assemble existing watershed plans		18				
Task 2c	Make annotated directory of existing local watershed databases		21				
Task 2d	Make annotated directory of resources		24				
Task 2e	Disseminate directories		30				
Task 2f	List of Assets and Needs across region		18,30				
Task 2g	Set up a cross referenced data base for each watershed		18				
	Task Products						
	Directory of resources		12				
	Directory of data bases		18				
	Success Criteria						
	25 groups receive directories & data base for 17 watersheds						

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY (cont'd)

	Task Description		*Completion month*		*Match Funds*	*CALFED funds*	*Total*
Task 3	**Develop Forum**			yr1	20,000	16,564	36,564
				yr2	20,000	24,796	44,796
				yr3	12,500	16,564	29,064
Task 3a	Discussion of CALFED and local goals		3,12,18				
Task 3b	Set up Teams		3				
Task 3c	Expand Forum Membership		ongoing				
Task 3d	Meeting set up		6				
Task 3e	Hold First Forum Meeting		6				
	Task Products						
	Team list		3				
	Forum Membership list		6				
	Meeting Schedule		6				
	List of Assets and Needs across region		18				
	Success Criteria						
	Set up Teams	3+ members of each team have advised regarding goals	6				
	Expand Forum Membership	20 members	18				
	Meeting set up	15 groups/agencies attend first forum	6				
Task 4	**Develop Field Program**			yr1	45,000	41,402	86,402
				yr2	45,000	41,402	86,402
				yr3	45,000	28,958	73,958
Task 4a	Arrange for partners and teams to deliver training		6				
Task 4b	Recruit needed instructors		ongoing				
Task 4c	Plan watershed site review, assessment and monitoring activities		6				
Task 4d	Conduct watershed site events & workshops		ongoing				
Task 4e	Compile site data for archiving at center		ongoing				
	Task Products						
	Roster of partners and instructors		3				
	Catalog of workshops		6				
	Success Criteria						
	Instructors on board	4	3				
	Workshop attendance	20+ attend 2+ events	6				

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY (cont'd)

	Task Description		*Completion month*		*Match Funds*	*CALFED funds*	*Total*
Task 5	**Develop Assessment Science Program**			yr1	12,500	8,282	20,782
				yr2	12,500	16,564	29,064
				yr3	12,500	16,564	29,064
Task 5a	Review watershed Science goals		12				
Task 5b	Assemble assessment techniques and protocols		6				
Task 5c	Assemble initial science based training curricula		12				
Task 5d	Develop science team		6				
Task 5e	Review plan		15				
Task 5f	Deliver the product to field team		ongoing				
Task 5g	Initiate data archive system at the center		12				
Task 5h	Test of assessment science program, with review and approval		30				
	Task Products						
	Catalogue of training curricula, techniques, and protocols		21				
	Science Team roster		6				
	Draft framework of data archive		24				
	Success Criteria						
	Assesment Program evaluation by data users	2+ regional agencies, 3+ local agencies, 5+ local groups					
Task 6	**Develop Outreach Program**			yr1	10,000	33,120	43,120
				yr2	- 0 -	24,796	24,796
				yr3	- 0 -	16,564	16,564
Task 6a	Train staff about outreach and recruitment		9				
Task 6b	Recruit monitoring and site review leaders and instructors		ongoing				
Task 6c	Train monitoring and site review leaders and instructors		ongoing				
Task 6d	Plan collaborations and partnerships		ongoing				
Task 6e	Publish newsletter announcements		ongoing				
Task 6f	Create volunteer exchange and personnel posting		21				
Task 6g	Recruit members to forum		ongoing				
	Task Products						
	Staff structure for outreach and monitoring		9				
	Newsletter articles and press releases		ongoing				
	Success Criteria						
	Partnerships	add 20 partners	28				
	Targeted outreach contacts	35,000 people per year					
	General Public contacts	100,000 people	33				

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY (cont'd)

	Task Description		*Completion month*		*Match Funds*	*CALFED funds*	*Total*
Task 7	**Establish Center(s) and Funding**			yr1	24,000	- 0 -	24,000
				yr2	24,000	8,282	32,282
				yr3	24,000	33,120	57,120
Task 7a	Arrange a permanent, central location		36				
Task 7b	Establish long term watershed goals and objectives		27				
Task 7c	Develop funding strategy		24				
Task 7d	Plan years 2 and 3		12				
	Task Products						
	Long range plan document with Goals, Objectives & Networks		30				
	Funding plan document		27				
	A center location		36				
	Success Criteria						
	Location	permanence, convenience, funded					
	Funding	$100,000 in proposals					
	Additional Sub-regional Centers	12+ in planning stages					
	Network in planning stages						
Task 8	**Reporting and Presentations**			yr1	- 0 -	8,282	8,282
				yr2	- 0 -	8,282	8,282
				yr3	500	12,444	12,944
Task 8a	Quarterly progress reports		ongoing				
Task 8b	Draft final report		33				
Task 8c	Final report		36				
Task 8d	Presentatons		36				
	Task Products						
	Quarterly Reports		ongoing				
	Final Report		36				
	Presentation notes and responses		36				
	Success Criteria						
	Budget obligations met						
	Evaluation complete						
	Reports are used to improve project management						
	Presentations are used to replicate project elsewhere						

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY

	Task Description	Labor rate*	Hours	Total Labor	Supplies & Rent	Travel	Materials	Sub-contract	Match	CALFED	Total
Task 1	Administration	42	1612	$67,712				$15,000	$30,000	$82,712	$112,712
Task 2	Develop Databases	42	1308	$54,924	$1,000			$3,000	$25,000	$58,924	$83,924
Task 3	Develop Forum	42	1308	$54,924				$3,000	$52,500	$57,924	$110,424
Task 4	Develop Field Program	42	2232	$93,762				$18,000	$135,000	$111,762	$246,762
Task 5	Develop Assessment Program	42	486	$20,410			$500	$21,000	$37,500	$41,910	$79,410
Task 6	Develop Outreach Program	42	1416	$59,480				$15,000	$10,000	$74,480	$84,480
Task 7	Establish Centers	42	986	$41,402	$72,000				$72,000	$41,402	$113,402
Task 8	Reporting and Presentations	42	691	$29,008		$500			$500	$29,008	$29,508
Totals:				$421,622	$73,000	$500	$500	$75,000	$362,500	$498,122	$860,622

Provide benefits/salary percentage here: 25%
Note: 10% overhead is included in benefigs/salary amount.
*** see Staff Positions Salary Table**

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY

Itemized budget for subcontract

	Task Description	Labor rate*	Hours	Total Labor	Supplies	Travel	Materials	Sub-contract	Match	CALFED	Total
Task 1	Administration	50	300	$15,000				N/A	N/A	$15,000	$15,000
Task 2	Develop Databases	50	60	$3,000						$3,000	$3,000
Task 3	Develop Forum	50	60	$3,000						$3,000	$3,000
Task 4	Develop Field Program	50	360	$18,000						$18,000	$18,000
Task 5	Develop Assessment Program	50	420	$21,000						$21,000	$21,000
Task 6	Develop Outreach Program	50	300	$15,000						$15,000	$15,000
Task 7	Establish Centers	50	0							$0	$0
Task 8	Reporting and Presentations	50	0							$0	$0
Totals:				$75,000	$0	$0	$0			$75,000	$75,000

Provide benefits/salary percentage here 0%

4. FEASIBILITY

The *Partnership for Sub-Regional Watershed Forums and a Watershed Center* will fund the third phase in a series of related projects. Its feasibility is based on:

- A local culture of good will
- Strong initial motivations for the community to participate ranging from aesthetics, family or neighborhood interests, to scientific inquiry and economic growth.
- The first two phases of research, surveys, ongoing field program, and pre-design watershed scale issues in the East Bay
- existence of successful, local programs and examples nation wide.
- The Partners' advisory Team members' skill in inclusive stakeholder involvement
- Ongoing special purpose gatherings
- Availability of diverse funding sources and interest in making in-kind contribution of space for the Center(s)
- Funded staff, capable of substantial time commitment.
- Interest by local government and regional agencies to fund and maintain the basic structure after this grant period.
- Non profit sector in-kind contribution, especially to scientific programming.

There are numerous active creek organizations in the area. They include neighboring property owners, local citizens, city staff, agencies, community organizations, schools, colleges, and churches. This has been largely a cooperative process built on a culture of good will and without any single overpowering players. ("Creation of an Urban Watershed Culture: Communities and College's Involvement in creek Restoration Policy:, Freeman & Douglas, Second Western Urban Streams Conference, San Luis Obispo, 1999).

The need for, and apparent feasibility of, a Watershed Forum and Watershed Center structure has been discovered through the partners' process, which began in 1989. Phase 1and 2 have been funded and/or supported in-kind by Merritt College Environmental Studies, the San Francisco Foundation San Francisco Bay Fund (SFBF), the California Department of Forestry (CDF), the City of Emeryville, the Regional Water Quality Control Board, the City of Oakland, Friends of Temescal Creek, Strong Foundation for Environmental Values and others.

This project will build on the CDF funded East Bay Fire and Watershed Convention. The Convention supports existing multiple landowner and multiple stakeholder communication efforts by facilitating discussion of related goals and objectives. The Convention helps form working relationships through hands-on projects which bring people with diverse interests and multi-cultural stakeholders together on the land. We have discovered existing overlaps, new potential for partnerships, undiscovered resources, and gaps which need to be filled.

One early result of this CDF funded Convention is that the Vicente Canyon fire and watershed stakeholders have agreed to ongoing joint ventures and collaborative watershed planning. This was the anticipated outcome of using field activities to encourage watershed awareness. It will be applied to the Watershed Center and Forum process.

Findings from our SFBF funded Initial Study showed that management plans which included the greatest number of stakeholders were more likely to be implemented. Those plans which did not include important local stakeholder groups had less or no success at implementation. For example the Urban/Wildlands vegetation management issue has faltered because of public anxiety. The current phase is bringing watershed groups, rich in cooperative spirit, together with the pre-fire fuel and habitat management interest groups, to help reduce their anxiety.

The capacity building and education methods have been tested and their results incorporated by the various partners. The partners' techniques will add new knowledge to watershed communication methods. The techniques cover:

- building institutional stability
- leaving no one out
- Delivering information
- Integrating the program into a mix of agency, institution, and community organizations
- Being able to systematically analyze assets and needs on each watershed.

Some successful examples are:

- San Luis Obisbo 4-H Club Citizen's Monitoring Program which integrates families and schools in maintaining single monitoring sites.
- The *FireWorks Curriculum* (Smith, McMurray, USDA Fire Sciences Lab, Missoula, 1999), which teaches elementary and middle school students in the field.

The *FireWorks Curriculum* students bring their parents into the discussion, many of whom had not responded to community outreach aimed at adults. This curriculum brings people with diverse motivations together to do watershed level planning. This is a strong, new technique of integrating aesthetics, risk, multi-cultural interests, science, recreation, parents, children, and educational curriculum. Its ongoing suite of community motivations keeps everyone engaged in watershed improvement.

A function of the Watershed Forums will be to arrange and facilitate gatherings on a consistent basis. Ongoing special purpose watershed related gatherings like the Turning the Tides Conference in Oakland or the CALFED PSP workshops need to be expanded as useful, though brief, interaction amongst participants.

The Watershed Forums and Watershed Center intend to become self-funding after 3 years. If successful, the Center will be moved from Merritt College to a more accessible location, hopefully contributed by an agency.

The Field Program will continue to be funded by Merritt College, and state funded educational institutions. The staff will by funded by local government. For example, the neighboring *Contra Costa County Watershed Forum* is funded by the county Board of Supervisors. We expect the basic Forum and Center structure will be maintained in the long term by agencies, local government in collaboration with citizen and non-governmental organizations. The non-profit sector and community based organizations will continue to provide innovative and responsive community and scientific programming.

Additional funds will be raised for replicating Centers, special programs, and the substantial commitment of time to learn the details of other local programs and projects in order to arrange cooperative agreements.

5. MONITORING

This intention of the *Partnership for Sub-Regional Watershed Forums and a Watershed Center* is to increase the social and educational capacity of the Sub-Region to develop robust baseline watershed data and then plan, execute, and maintain watershed projects. Both the social and physical processes of the watershed will be monitored for their effectiveness at achieving the goals of increased water quality, quantity, and habitat.

This program anticipates developing enough social and scientific data to design a test to measure increased frequency, size, quality, or durability of executed projects due to an enhanced resource delivery system or infrastructure. This test will be corroborated with scientifically monitored outcomes.

The Watershed Center staff will inventory existing plans, projects, and groups. This inventory will provide a measurable baseline. The staff will explore the use of social science methods to correlate attitude changes, and activity behavior changes; or will leverage such studies.

Relationship of this Partnership to the community. The Partnership for this grant was assembled because its members are currently working at multiple levels throughout the region (see sections 2 and 8 for listings). They include consulting and academic scientists, teachers, the non-profit sector, community groups, agencies, and government. There are 19 "Friends of" creek groups or individuals listed in *Creeks Speak* in the East Bay sub-region. A number of the creeks do not yet have organized groups, but there are individuals hoping to form one. Partners for this project are now actively working with 7 of these groups, 5 have pledged in kind matching services, and Advisors for this project were chosen because they are working with every existing East Bay creek organization. Two of the project advisors are responsible for producing the Oakland Museum's maps of the East Bay creeks.

The *Partnership for Sub-Regional Watershed Forums and a Watershed Center* is an educational program and partnership development tool. It's effectiveness will be monitored by recording the numbers of participants, their activity level, and their awareness. These will be assessed at the beginning of a particular activity and again later during the project period. Some of these effectiveness criteria are:

- The number of organizations and individuals in partnerships or collaborations.
- The range of types of organizations represented
- The number of watershed monitoring programs operating in the sub-region
- The number of whole watershed assessment strategies adopted
- The number of funding efforts developed
- The number of participants using the CALFED Watershed Goals and Objectives
- The number of on the ground projects reviewed as part of a whole watershed assessment.

Asset Mapping and Social Mapping of Watersheds are expected to yield these assessment data:

- Distribution of technical and financial resources in watersheds as test of equity
- Location of Reference Sites with an ecosystem health score
- Location of watershed issues by accepted assessment methods
- Location of potential projects
- Location of existing projects and monitoring data
- Location of research sites
- Location of watershed resources and centers
- Characterization of watersheds for potential multiple benefits.
- Characterization of watersheds by ethnographic, historical, and business data

This project plans to measure some aspects of the somewhat intangible human benefits of bringing diverse watershed interested groups together in the field. Meeting helps them communicate, learn, and become active planners to choose and implement their own goals. This project will research, use, and evaluate some measurement tools for intangible outcomes

Monitoring water quality. Benefits are expected to include: water quality, connection of fragmented habitat, groundwater retention, geomorphic stability, water use efficiency, increased recreational space, increased property value, reduced flooding, and reduced fire hazard. A high ratio of impermeable surface roadways and buildings and chemically treated landscaping create rapid flood runoff events and continuous water quality problems. Bank erosion and channel downcutting are typical in the more natural stream reaches. Flooding has encouraged extensive culverting which has removed habitat and increased flow velocity.

Groundwater recharge is limited, thus reducing stream flow, habitat, and moisture. The watershed is classed as a California Unified Watershed Assessment Priority Category I. These conditions have generated active local interest in, and diverse approaches to, watershed restoration in the Sub-Region.

Various monitoring protocols have been used by the Watershed Forum and Watershed Center partners. One of the tasks of the Science and Field Teams and the Forum will be to select an integrated approach to data gathering, storage, and retrieval. The Forum will collaboratively consider priorities for decision making.

This project will facilitate agreements to store local watershed data and allow for its retrieval. A number of data bases exist such as the UC Davis Natural Resources Project Inventory, NRPI, the UC Berkeley Watershed Archives, and the San Francisco Bay Joint Venture Habitat Projects Database. The staff will research existing archives and data bases to determine who can access them, how to access them, what their contents are.

6. ASSESSMENT

This goal of the Watershed Forum and Watershed Center is to increase capacity for local group, multiple-stakeholder participation in scientific watershed assessment by providing easy access to information and training. It is not for a specific on-the-ground project. Richer watershed data will facilitate the Forums' support for adaptive management practices by collaborating local groups and regional resources.

The Science Team and Field Team will build on the review of monitoring protocols already conducted by a Merritt College partner for Friends of Sausal Creek. Initial consideration will start with the following Protocols: the Regional Water Quality Control Board's *Regional Monitoring and Assessment Strategy* (RMAS), the *Surface Waters Ambient Monitoring Program* (SWAMP), the *Biological Survey Studies for the East Bay Municipal Utility District, Guidelines for Gathering and Recording Wildlife Information* Stebbins *et al.,*1996), and the ongoing *One Acre GIS* citizen botanical survey technique. These protocols include paired observation watersheds, chemical, microbiological, and toxicological data in addition to the elements mentioned under the assessment section below. The Watershed Forum and Watershed Center partners will participate in the CALFED CMARP process. Members of the Field Team are also working with monitoring at Arrowhead Marsh. This proposal provides an opportunity to coordinate these efforts and others.

The initial training package will be the ongoing Watershed Assessment Resource Center (WARC) Watershed Assessment Workshops. These include:

- monitoring physical processes in watersheds and creeks,
- monitoring biological aspects of habitats,
- water quality monitoring,
- pre and post-restoration project monitoring,
- watershed assessment (boundaries, stream systems, channel slope and confinement, study reaches/stations, land use, data interpretation, rainfall, streamflow, siltation/channel form)
- assessing riparian corridor/habitat restoration success,
- mapping non-native species
- GIS development.

Of the partners, the San Francisco Estuary Institute, Save San Francisco Bay, Friends of the Estuary, the Aquatic Outreach Institute, and Merritt College Environmental Sciences have all developed parts of assessment and monitoring systems for volunteers, professionals, and K-12 students. This project will help coordinate these assessment tools.

7. CALFED OBJECTIVES

This program intends to develop a durable infrastructure to improve ecosystem quality, water supply, and water quality in our region.

Most of the Bay Area is not in the Bay–Delta problem area where CALFED funding has been focused. As a result, Bay region watershed organizations lack awareness of CALFED goals and principles. They, however, share similar goals. The large land areas, water sources, and agricultural water users are primarily upstream of the Bay counties. The water users, residential and industrial, and the consumers of the Bay-Delta agricultural products live densely in the urban watersheds of the solution areas.

Technical assistance The Center will facilitate flow of information and access to resources between neighboring watershed groups, local stakeholders, and CALFED, sharing the annotated inventories, lists of lists, and data we assemble. We expect to help make the many regional and state technical resources available to groups and city planners. City planners are the government level at which projects are frequently implemented.

This proposal builds on existing activities and documents. The Watershed Center, Field Program, and Forums will connect groups to the resources. The proposal coordinates protocols and information management for local watershed groups on smaller watersheds. The resulting higher level of information will assist stimulate assessment, monitoring, implementation, conservation, and restoration project planning at the local scale

Our program will utilize and refer CALFED's capacity for technical assistance. We will participate in CALFED meetings and workshops, share data, communication, and site visits with the CALFED Bay-Delta Program.

Collaboration Community involvement and collaborative use of assets should increase the number of projects working toward CALFED goals. *The Partnership for Sub-Regional Watershed Forums and a Watershed Center* focuses first on understanding and improving social processes as a way of increasing local watershed level planning and activities. The Watershed Center will develop an easy to use delivery system to build local community capacity for stewardship. The CALFED Watershed Program Plan is a useful framework for integrating local activities. Local groups may not see themselves in a watershed context or have implemented adaptive management practices.

This proposal will increase collaboration between local groups and elected officials by complementing the Association for Bay Area Governments' CALFED Task Force proposal. The CALFED Task Force and its program will form the basis of the Policy Team. We are already working with planners and Environmental Service Department staff in Oakland and with the City of Emeryville.

The individuals and groups we have selected as initial partners and advisors have made effective efforts to provide access to watershed management for all individual and sector stakeholders. The Partnership's improvements to collaboration between interested parties can reduce the number of missed watershed planning opportunities caused by fast moving development and land use changes in the region. We will become a CALFED partner and participant. We will make these same resources available to the Bay-Delta region.

Local Environmental Protection Linking neighboring watersheds with local and regional plans and resources will build sustainable, locally-led watershed stewardship. The Watershed Center will build capacity for local watershed management to appropriately connect site specific projects. The Forum will use CALFED Watershed Program Objectives and Watershed Program Principles to facilitate discussion and adoption of local goals by our diverse stakeholders.

Monitoring The Forum, Field Program, Assessment Science Program, and Outreach Program add staff to support monitoring. The Field Program and Assessment Science Program will use CMARP and MSCS methods at low, or no cost. They will plan to make the data available on the Internet. Forums and workshops will enhance ongoing assessments and help share their findings for project planning

Adaptive Management We will implement science-based adaptive management by integrating local activities in: watershed assessment, technical education, planning, installation, monitoring, and maintenance

Outreach and Education We anticipate that establishing the *Partnership for Sub-Regional Watershed Forums and a Watershed Center* will provide a community scale resource delivery system to meet local goals, CALFED goals, and CALFED Watershed Program goals through information exchange. The Center is an

education and outreach node. It proposes to simplify access to needed information by collecting it, or links to it, in a “one stop shop” site designed to be easily replicated.

It will reach out to Indian tribes and under represented groups who have the least access to both watershed education and open space habitat. We will help bring information and resources, which are somewhat inaccessible and primarily available to professionals, to community groups, students, and land use planners to improve their effectiveness. We will promote involvement with CALFED advisory committees. Workshops will target local watersheds which currently have few activities. Our program will use the CALFED Watershed Program Plan and will encourage CALFED partnership opportunities. We expect the program developed for local centers will prove useful to CALFED throughout the Bay-Delta region to design a larger network. We hope to enhance existing local activities which have recreational and educational connections to upstream CALFED sites.

Funding Assistance A number of the Partners and Advisors are experienced at fundraising and will be able to direct resources at needed areas once there is a stable and convenient system of communication.

8. OTHER ASPECTS

Community Involvement: as part of phase 2, the following individuals and organizations, are giving a reasonable amount of telephone consultation. They plan to bring the resulting invitation to participate in the Forum to their agency, organization, or institution.

- Alameda Countywide Clean Water Program, James Scanlin, email
- Alameda County Flood Control and Water Conservation District, Sharon Gosselin, email
- Alameda County Resource Conservation District, Resolution
- Aquatic Outreach Institute, email
- Associates Environmental Education, Partner Letter
- Building Industry Professionals for Environmental Responsibility, phone
- California Department of Forestry, Steven F. Woodill, Chief, CDF-Santa Clara, letter
- California Native Plant Society, East Bay Chapter, Board Member Noah David Booker, phone
- City of Berkeley Councilmember Donna Spring, phone
- City of Berkeley Fire Department, Chief Garcia
- City of Oakland Councilmember Nancy Nadel, letter
- City of Oakland, Watershed Improvement Program, Lesley Estes, phone
- Diablo Fire Safe Council, Jennifer Renk, email
- East Bay Municipal Utilities District as part of Diablo Fire Safe Council, Scott Hill, phone
- Environmental Science Institute, Partner Letter
- Friends of Temescal Creek, Partner Letter
- Leo Levinson, Ecology and Fire Group (Tom Bates, co-sponsor), phone
- McClung, William, *News from the Buffer Zone*, email comments
- Merritt College Environmental Studies Program, Partner Letter
- One Acre Team, David Self, Society for Ecological Restoration; partner letter
- Saint John's Episcopal Church, Oakland, Ecology Group, Margaret Bowman, phone
- San Francisco Bay Joint Venture (SFBJV), email letter
- Sanders, Dale Ph.D., Resource Management and Planning, phone
- Urban Creeks Council, phone

Initial Study Participants:

(Guest Lecturers, Students, or Interviewed by Students):

- Tim Gordon, Naturalist, East Bay Regional Parks
- Jerry Kent, Operations Manager, East Bay Regional Parks
- Joan Suzio, Naturalist, East Bay Regional Parks
- Deborah Hawk, Federal Emergence Management Agency, Hazard Mitigation Grant Program
- Bob Flasher, Naturalist, East Bay Municipal Utility District, Instructor, Merritt College Environmental Science Department
- William McClung, *News from the Buffer Zone*
- David Self, Botanist, Zentner and Zentner, Society for Ecological Restoration, California Past President
- Teresa Williams, Professor of Geology, Merritt College
- Ron Felzer, Professor of Forestry and Biology, Merritt College
- Gary Scott, Adjunct Professor of Stream Hydrology, Merritt College
- Fred Beddall, Sierra Club Bay Chapter Conservation Staff
- Robert Stebbins , Professor of Zoology, Emeritus, University of California Berkeley
- Dale Sanders, Senior Planner, University of California, Berkeley
- Helen Klebenoff, Citizens for Oakland Open Space, Regional Parks Board
- Rex Deitderich, Berkeley Fire Chief, retired, VMC member
- John Steere, Planner, East Bay Parks citizen's advisory committee, Bay Area Citizens For Creek Restoration
- Noah Booker, California Native Plant Society, Shelterbelt
- Denis Foley, Fire Inspector, City of Berkeley
- Lucky Thoman, Fire Marshall, City of Berkeley
- Carl Wilson, National Fire Specialist, U.S.F.S., Retired

- Elmhurst Middle School Students
- Oakland Technical High School Students
- Beacon School Students
- Advanced Placement Multi-Cultural Outreach High School Program Students, U.C. Berkeley
- Merritt College Environmental Sciences Students
- Fireman's Fund Insurance